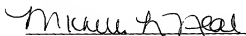


PATENT APPLICATION

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Group		}	Certificate Under 37 C.F.R. 1.10
Art Unit:	Unknown	}	"EXPRESS MAIL" MAILING LABEL NUMBER
		}	EL 731384636US
Attorney		}	DATE OF DEPOSIT MAY 24, 2001
Docket No.:	SHC0124	}	I HEREBY CERTIFY THAT THIS PAPER OR FEE IS BEING
		}	DEPOSITED WITH THE UNITED STATES POSTAL SERVICE
Applicant:	Takaaki Shimada et al.	}	"EXPRESS MAIL POST OFFICE TO ADDRESSEE"
		}	SERVICE UNDER 37 C.F.R. 1.10 ON THE DATE
Invention:	DISPOSABLE PULL-ON UNDERGARMENT	}	INDICATED ABOVE AND IS ADDRESSED TO THE ASSISTANT COMMISSIONER FOR PATENTS WASHINGTON, DC 20231.
		}	on MAY 24, 2001
Serial No:	Unknown	}	
		}	
Filed:	Herewith	}	
		}	
Examiner:	Unknown	}	


Michelle L. Neal

PRELIMINARY AMENDMENT

Assistant Commissioner for Patents
Washington, DC 20231

Sir:

Prior to the examination of the above-identified application, please amend the application as follows:

IN THE SPECIFICATION

Please replace the second full paragraph on page 3 with the following:

--It is an object of this invention to provide the disposable pull-on undergarment designed to be smoothly torn off along the bonding zones.--

Please replace the fourth paragraph beginning on page 3 continuing on page 4 with the following:

--According to this invention the first elastic members respectively have first opposite ends and first intermediate portions extending between the first opposite ends, respectively, and the first opposite ends are positioned and fixed at first zones defined immediately inside the bonding zones in a circumferential direction of the waist-opening.--

Please replace the first full paragraph on page 4 with the following:

- -According to one embodiment of this invention, the second elastic members respectively have second opposite ends and second intermediate portions extending between the second opposite ends, respectively, and the second opposite ends are positioned and fixed at second zones defined immediately inside the bonding zones in respective circumferential directions of the leg-openings.- -

Please replace the second full paragraph on page 4 with the following:

- -According to another embodiment of this invention, at least one third elastic member lying below the first elastic members and being stretchable in the circumferential direction of the waist-opening is attached under tension to at least one of the first and second waist regions between the peripheral edge of the waist-opening and the peripheral edges of the leg-openings and wherein the third elastic member has third opposite ends and third intermediate portions extending between the third opposite ends and the third opposite ends are positioned and fixed at third zones defined immediately inside the bonding zones in the circumferential direction of the waist-opening.- -

Please replace the first full paragraph on page 5 with the following:

- -According to still another embodiment of this invention, a peel strength between the first and second waist regions in the bonding zones is in a range of 4 ~ 40 N with respect to 25 mm, a longitudinal dimension of the bonding zone.- -

Please replace the first full paragraph on page 8 with the following:

- -The elastic members 8 associated with the waist-opening have their longitudinally opposite ends 8a (first opposite ends) lying in the transversely opposite side edge portions 1a of the front and rear waist regions 20, 22 and an intermediate portions 8b (first intermediate portion)

extending between the respective opposite ends 8a. The respective opposite ends 8a are positioned in zones B2 defined immediately inside the respective bonding zones B1 in the circumferential direction X. The elastic members 8 are disposed between the top- and backsheets 2, 3 with their respective opposite ends 8a partially fixed to inner surfaces of these sheets 2, 3 in the respective zones B2 by means of adhesive 10 and with their intermediate portions 8b intermittently fixed to inner surfaces of these sheets 2, 3 by means of adhesive 11.- -

Please replace the second paragraph beginning on page 8 and continuing on page 9 with the following:

- -The elastic members 9 associated with each of the leg-openings have longitudinally opposite ends 9a (second opposite ends) lying in the transversely opposite side edge portions 1a of the front and rear waist regions 20, 22, respectively, and intermediate portions 9b (second intermediate portion) extending between the opposite ends 9a. The opposite ends 9a are positioned in zones B3 defined immediately inside the respective bonding zones B1 in the circumferential direction Y. The elastic members 9 are disposed between the top- and backsheets 2, 3 with their respective opposite ends 9a partially fixed to inner surfaces of these sheets 2, 3 in the respective zones B3 by means of adhesive 12 and with their intermediate portions 9b intermittently fixed to the inner surfaces of these sheets 2, 3 by means of adhesive 13.- -

Please replace the first full paragraph on page 12 with the following:

- -The front and rear waist regions 20, 22 of the diaper 1 are provided with, in addition to the elastic members 8 associated with the waist-opening (first elastic members) and the elastic members 9 associated under the leg-openings, a plurality of auxiliary elastic members 14 (third elastic members) that are positioned and fixed under tension to the diaper 1 below the elastic members associated with the waist-opening so as to extend in its circumferential direction X.

The auxiliary elastic members 14 are attached to the front and rear waist regions 20, 22 and extend across the core 4 in the circumferential direction X of the waist-opening.- -

Please replace the fourth paragraph beginning on page 13 and continuing on page 14 with the following:

- The opposite ends 8a, 9a, 14a of the respective elastic members 8, 9, 14 are absent in the bonding zones B1 and therefore a factor which will resist tearing off of the diaper 1 along the bonding zones B1 is only a peel strength of the adhesive in these bonding zones B1. The diaper 1 shown by Fig. 4 is similar to the diaper 1 shown by Fig. 1 in that the peel strength in the bonding zone B1 is in a range of 4 ~ 40 N/25 mm of the bonding zone B1 as measured longitudinally thereof.- -

IN THE CLAIMS

Please amend Claim 1 as follows:

1. (Amended) A disposable pull-on undergarment comprising:

first and second waist regions opposed to each other; a crotch region extending between said first and second waist regions;

bonding zones connecting said first and second waist regions to one another, and extending along transversely opposite side edge portions of said first and second waist regions so as to define a waist-opening and a pair of leg-openings;

first elastic members bonded under tension to a peripheral edge of the waist-opening and being stretchable circumferentially of said first and second waist regions; and

second elastic members bonded under tension to peripheral edges of the leg-openings and being stretchable circumferentially of said leg-openings,

said first elastic members each having first opposite ends and intermediate portions extending between said first opposite ends, said first opposite ends being positioned and fixed

at first zones defined immediately inside said bonding zones in a circumferential direction of said waist-opening.

Please amend Claim 2 as follows:

2. (Amended) The disposable pull-on undergarment according to Claim 1, wherein said second elastic members each have second opposite ends and second intermediate portions extending between said second opposite ends, and said second opposite ends being positioned and fixed at second zones defined immediately inside said bonding zones in respective circumferential directions of said leg-openings.

Please amend Claim 3 as follows:

3. (Amended) The disposable pull-on undergarment according to Claim 1, further comprising at least one third elastic member lying below said first elastic members and being stretchable in said circumferential direction of said waist-opening, said at least one third elastic member being attached under tension to at least one of said first and second waist regions between the peripheral edge of said waist-opening and said peripheral edges of said leg-openings, each of said at least one third elastic member has third opposite ends and third intermediate portion extending between said third opposite ends, said third opposite ends being positioned and fixed at third zones defined immediately inside said bonding zones in the circumferential direction of said waist-opening.

Please amend Claim 4 as follows:

4. (Amended) The disposable pull-on undergarment according to Claim 1, wherein a peel strength between said first and second waist regions in said bonding zones is in a range of about 4 to about 40 N with respect to a 25 mm longitudinal dimension of said bonding zone.

IN THE ABSTRACT

Please amend the abstract as follows:

- -The disposable pull-on undergarment that has first and second waist regions and a crotch region extending between these two waist regions. The waist regions are connected with each other in bonding zones extending along transversely opposite side edge portions thereof so as to define a waist-opening and a pair of leg-openings. First elastic members are bonded under tension to peripheral edge of the waist-opening and second elastic members are bonded under tension to peripheral edges of the leg-openings so that respective opposite ends of the first elastic members are positioned and fixed at first zones defined immediately inside the bonding zones in a circumferential direction of the waist-opening and respective opposite ends of the second elastic members are positioned and fixed at second zones defined immediately inside the bonding zones in a circumferential direction Y of the leg-openings.- -

• • • R E M A R K S • • •

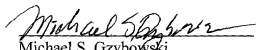
By the present Preliminary Amendment, the specification, claims and abstract have been revised to more clearly describe applicant's invention in accordance with the requirements of 35 U.S.C. § 112.

Care has been taken so as to avoid the addition of new matter in the specification, claims and abstract.

Entry of the present Preliminary Amendment prior to the examination of the application is respectfully requested.

In the event applicant has overlooked the need for an extension of time, an additional extension of time, payment of fee, or additional payment of fee, applicant hereby petitions therefor and authorizes that any charges be made to Deposit Account No. 02-0385, Baker & Daniels.

Respectfully submitted,


Michael S. Gzybowski
Reg. No. 32,816

BAKER & DANIELS
111 East Wayne Street
Suite 800
Fort Wayne, Indiana 46802
(219) 460-1661

MSG/mln/182316

VERSION WITH MARKINGS TO SHOW CHANGES MADE

Changes Made to Specification Paragraphs

The second full paragraph on page 3 has been amended as follows:

It is an object of this invention to provide the disposable pull-on undergarment [improved] designed to be smoothly torn off along the bonding zones.

The fourth paragraph beginning on page 3 continuing on page 4 has been amended as follows:

[The improvement according] According to this invention [is in that] the first elastic members respectively have first opposite ends and first intermediate portions extending between the first opposite ends, respectively, and the first opposite ends are positioned and fixed at first zones defined immediately inside the bonding zones in a circumferential direction of the waist-opening.

The first full paragraph on page 4 has been amended as follows:

According to one [preferred] embodiment of this invention, the second elastic members respectively have second opposite ends and second intermediate portions extending between the second opposite ends, respectively, and the second opposite ends are positioned and fixed at second zones defined immediately inside the bonding zones in respective circumferential directions of the leg-openings.

The second full paragraph on page 4 has been amended as follows:

According to another [preferred] embodiment of this invention, at least one third elastic member lying below the first elastic members and being stretchable in the circumferential direction of the waist-opening is attached under tension to at least one of the first and second

waist regions between the peripheral edge of the waist-opening and the peripheral edges of the leg-openings and wherein the third elastic member has third opposite ends and third intermediate portions extending between the third opposite ends and the third opposite ends are positioned and fixed at third zones defined immediately inside the bonding zones in the circumferential direction of the waist-opening.

The first full paragraph on page 5 has been amended as follows:

According to still another [preferred] embodiment of this invention, a peel strength between the first and second waist regions in the bonding zones is in a range of 4 ~ 40 N with respect to 25 mm, a longitudinal dimension of the bonding zone.

The first full paragraph on page 8 has been amended as follows:

The elastic members 8 associated with the waist-opening have their longitudinally opposite ends 8a (first opposite ends) lying in the transversely opposite side edge portions 1a of the front and rear waist regions 20, 22 and an intermediate portions 8b (first intermediate portion) extending between the respective opposite ends 8a. The respective opposite ends 8a are positioned in zones B2 defined immediately inside the respective bonding zones B1 in the circumferential direction X. The elastic members 8 [is] are disposed between the top- and backsheets 2, 3 with their respective opposite ends 8a partially fixed to inner surfaces of these sheets 2, 3 in the respective zones B2 by means of adhesive 10 and with their intermediate portions 8b intermittently fixed to inner surfaces of these sheets 2, 3 by means of adhesive 11.

The second paragraph beginning on page 8 and continuing on page 9 has been amended as follows:

The elastic [member] members 9 associated with each of the leg-openings [has] have longitudinally opposite ends 9a (second opposite ends) lying in the transversely opposite side

edge portions 1a of the front and rear waist regions 20, 22, respectively, and [an] intermediate [portion] portions 9b (second intermediate portion) extending between the opposite ends 9a. The opposite ends 9a are positioned in zones B3 defined immediately inside the respective bonding zones B1 in the circumferential direction Y. The elastic members 9 are disposed between the top- and backsheets 2, 3 with their respective opposite ends 9a partially fixed to inner surfaces of these sheets 2, 3 in the respective zones B3 by means of adhesive 12 and with their intermediate portions 9b intermittently fixed to the inner surfaces of these sheets 2, 3 by means of adhesive 13.

The first full paragraph on page 12 has been amended as follows:

The front and rear waist regions 20, 22 of the diaper 1 are provided with, in addition to the elastic members 8 associated with the waist-opening (first elastic members) and the elastic members 9 associated under the leg-openings, a plurality of auxiliary elastic members 14 (third elastic members) that are positioned and fixed under tension to the diaper 1 below the elastic members associated with the waist-opening so as to extend in its circumferential direction X. The auxiliary elastic members 14 are attached to the front and rear waist regions 20, 22 and extend across the core 4 in the circumferential direction X of the waist-opening.

The fourth paragraph beginning on page 13 and continuing on page 14 has been amended as follows:

The opposite ends 8a, 9a, 14a of the respective elastic members 8, 9, 14 are absent in the bonding zones B1 and therefore a factor which will resist tearing off of the diaper 1 along the bonding zones B1 is only a peel strength of the adhesive in these bonding zones B1. The diaper 1 shown by Fig. 4 is similar to the diaper 1 [shwon] shown by Fig. 1 in that the peel strength in the bonding zone B1 is in a range of 4 ~ 40 N/25 mm of the bonding zone B1 as measured longitudinally thereof.

Changes Made to Claims

Claim 1 has been amended as follows:

1. (Amended) A disposable pull-on undergarment [having] comprising:

first and second waist regions opposed to each [other and] other; a crotch region extending between [these two] said first and second waist regions; [wherein these first and second waist regions are connected with each other in]

bonding zones connecting said first and second waist regions to one another, and extending along transversely opposite side edge portions [thereof] of said first and second waist regions so as to define a waist-opening and a pair of leg-openings; [and wherein]

first elastic members [being stretchable circumferentially of the waist regions are] bonded under tension to a peripheral edge of the waist-opening and being stretchable circumferentially of said first and second waist regions; and

second elastic members [being stretchable circumferentially of the legs are] bonded under tension to peripheral edges of the [leg-openings,] leg-openings and being stretchable circumferentially of said leg-openings.

[said disposable pull-on undergarment further comprising:] said first elastic members [respectively] each having first opposite ends and intermediate portions extending between said first opposite ends, [respectively, and] said first opposite ends being positioned and fixed at first zones defined immediately inside said bonding zones in a circumferential direction of said waist-opening.

Claim 2 has been amended as follows:

2. (Amended) The disposable pull-on undergarment according to Claim 1, wherein said second elastic members [respectively] each have second opposite ends and second intermediate portions extending between said second opposite ends, [respectively,] and said second opposite

ends [are] being positioned and fixed at second zones defined immediately inside said bonding zones in respective circumferential directions of said leg-openings.

Claim 3 has been amended as follows:

3. (Amended) The disposable pull-on undergarment according to Claim 1, [wherein] further comprising at least one third elastic member lying below said first elastic members and being stretchable in said circumferential direction of said [waist-opening is] waist-opening, said at least one third elastic member being attached under tension to at least one of said first and second waist regions between the peripheral edge of said waist-opening and said peripheral edges of said leg-openings, [and wherein] each of said at least one third elastic member has third opposite ends and third intermediate portion extending between said third opposite ends, [and] said third opposite ends [are] being positioned and fixed at third zones defined immediately inside said bonding zones in the circumferential direction of said waist-opening.

Claim 4 has been amended as follows:

4. (Amended) The disposable pull-on undergarment according to Claim 1, wherein a peel strength between said first and second waist regions in said bonding zones is in a range of about 4 [~] to about 40 N with respect to a 25 mm [mm, a] longitudinal dimension of said bonding zone.

Changes Made to Abstract

The disposable pull-on undergarment that has first and second waist regions and a crotch region extending between these two waist regions. The waist regions are connected with each other in bonding zones extending along transversely opposite side edge portions thereof so as to define a waist-opening and a pair of leg-openings. First elastic members are bonded under tension to peripheral edge of the waist-opening and second elastic members are bonded under tension to peripheral edges of the leg-openings so that respective opposite ends of the first elastic members are positioned and fixed at first zones defined immediately inside the bonding zones in a circumferential direction of the waist-opening and respective opposite ends of the second elastic members are positioned and fixed at second zones defined immediately inside the bonding zones in a circumferential direction Y of the leg-openings.